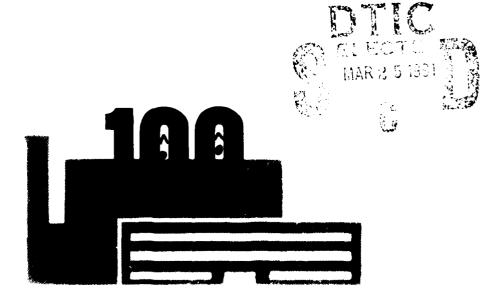
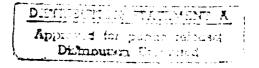


100 COMPANIES

RECEIVING THE LARGEST DOLLAR VOLUME OF PRIME CONTRACT AWARDS

Fiscal Year 1990





100 COMPANIES RECEIVING THE LARGEST DOLLAR VOLUME OF PRIME CONTRACT AWARDS

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Department of Defense
Washington Headquarters Services
Directorate for Information
Operations and Reports



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FOREWORD

100 Companies Receiving the Largest Dollar Volume of Prime Contract Awards is published annually. This report contains summary data on the 100 companies, including their subsidiaries, which were awarded the largest total dollar volume of Department of Defense prime contract awards during Fiscal Year 1990.

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INTRODUCTION

This report presents summary data on the 100 companies and their subsidiaries receiving the largest dollar volume of Department of Defense (DoD) prime contract awards during fiscal year (FY) 1990. Table 1, (page 7) lists the 100 companies in alphabetical order and gives their associated rank. Table 2 (page 9) identifies the parent companies in rank order, with their subsidiaries, and gives the total net value of awards for both the parent company and its subsidiaries. In many cases the parent company receives no awards itself but appears on the list because of its subsidiaries. Table 2 also shows what percent of the total awards each company's awards represent as well as the cumulative percent represented by all companies.

NOTES ON COVERAGE

Data in this report reflect the net value of both debit and credit procurement actions over \$25,000; e.g. the value of a terminated contract or other downward adjustment to a contract is deducted from a firm's total award amount, while modifications and other positive adjustments are treated as increases. Procurement actions include definitive contracts, the obligated portions of letter contracts, job orders, task orders, delivery orders, and any other orders against existing contracts. Research and development, services, construction, and supply and equipment contracts, worldwide, are included.

The report does not include those parts of indefinite quantity contracts that have not been translated into specific orders to business firms, or those contracts that have not yet become mutually binding agreements between the government and the company. The company totals do not include contracts made by other U.S. Government agencies and financed with Department of Defense funds or contracts awarded in foreign nations through their respective governments.

DATA RELATING TO COMPANIES IN THIS PUBLICATION ARE SUBJECT TO THE ACCURACY OF THE DUN & BRADSTREET CORPORATION'S DATA UNIVERSAL NUMBERING SYSTEM AND ITS ABILITY TO DESCRIBE RELATIONSHIPS OF COMPANIES.

HIGHLIGHTS

Department of Defense prime contract awards over \$25,000 totaled \$130.8 billion during FY 1990, \$1.8 billion more than in FY 1989. The 100 firms and their subsidiaries receiving the largest amount of DoD contracts in FY 1990 received \$86.7 billion or 66.3 percent of this amount, primarily for aircraft, missile/space systems, ships, and electronics & communications equipment. In FY 1989 the top 100 companies received \$85.6 billion or 66.4 percent of all awards.

Exhibit A below shows that the first five companies received 21.6 percent of the total received by all companies in FY 1990, compared with 22.3 percent during FY 1989. The company ranked as number one during FY 1990, McDonnell Douglas Corp., also ranked as number one last year with awards of \$8.2 billion during FY 1990 as compared with \$8.6 billion last year. The smallest total amount received by a company in the FY 1990 Table 2 was \$119 million, compared to \$110 million in FY 1989.

Exhibit A

COMPANY	Percent of Total					
POSITION	FY 1990	FY 1989	FY 1988	FY 1987		
1st 2nd 3rd 4th 5th	6.3% 4.8 4.3 3.1 3.1	6.7% 5.3 4.5 2.9 2.9	5.8% 4.8 4.1 3.7 3.0	5.4% 4.9 4.1 3.9 2.9		
TOTAL 1-5	21.6	22.3	21.4	21.2		
6-10 11-25	11.5 15.9	12.2 15.1	12.6 15.7	12.7 16.6		
TOTAL 1-25	49.0	49.6	49.7	50.5		
26-50 51-75 76-100 TOTAL 1-100	9.8 4.6 2.9 ——— 66.3%	9.4 4.7 2.7 66.4%	8.5 4.7 2.9 ————65.8%	9.3 4.6 2.5 		

Changes in the Top 100 Companies, FY 1989 To FY 1990

Seventeen companies which did not appear on the list last year are among the top 100 companies this year. (See Exhibit B below.) Of these, one appears in position 47, one in position 57, and the balance between 60 and 100. The companies which appeared on the FY 1989 list which did not appear on this year's list are also shown in Exhibit B. Companies are considered as appearing on the list in both years despite mergers, acquisitions, divestitures, and name changes if a major component of a newly constituted company or the newly constituted company itself made the list as a component of a company in the top 100 in the prior year.

Exhibit B

Companies Listed in FY 1990 But not in FY 1989

Amerada Hess Corp. Arco Products Co. Bollinger Machine Shop & Shipyard Bolt, Beranek & Newman, Inc. Crowley Maritime Corp. CRS Sirrine Metcalf & Eddy JV Day & Zimmerman Duchossois Enterprises, Inc. Fed Ex Pan Am Northwest et al JV 1/ General Electric Co., PLC Goodyear Tire & Rubber Co., The International Marine Carriers International Shipholding Corp. Ram Systems GMBH Talley Industries, Inc. Varian Associates, Inc. World Rosen Key Amer et al JV 2/

Companies Listed in FY 1989 But not in FY 1990

Atlantic Richfield Co. Bechtel Group, Inc. Bell Boeing JV Brunswick Corp. Continental Maritime Industries Delta Dental Plan of California Draper, Charles Stark Lab., Inc. EG&G, Inc. General Instrument Corp. (Del) 3/ ITT & Varo JV Mason Co., The Montedison SPA Navcom Defense Electronics, Inc. Nisshin Services Co., Ltd. Smiths Industries, PLC Sundstrand Corp. Zenith Electronics Corp.

- 1/ Federal Express, Northwest Airlines, Pan Am World Airways, Tower Air, and United Parcel Service Joint Venture.
- World Airways, Rosenbalm Aviation, Key Airlines, American Airlines, Evergreen International Airlines, and Emery Worldwide Joint Venture.
- 3/ General Instrument Corp. acquired by Forstmann Little & Co.

Two other major changes during this year were the acquisition of Plessey Co., PLC by GEC Siemens (General Electric Co., PLC and Siemens AG) and the name change of Singer Co. to Bicoastal Corp.

Primary Procurement Categories of the Top 100 Companies

Although the contract work of many companies on the list includes more than one procurement category, each company has been assigned in Exhibit C (below) to the procurement category that accounts for its largest dollar volume of DoD awards; for example, General Electric Co. is a multi-industry company producing electronic and communications equipment and industrial and consumer products. For this exhibit, it has been assigned to "Aircraft", the procurement category accounting for its largest dollar volume of DoD contract awards.

Exhibit C

Procurement	Numb	er of Comp	anies
Category	FY 1990	FY 1989	Change
Aircraft Missiles Ships Tank-Automotive Ammunition Electronics Services Construction Petroleum Weapons Subsistence All Other	16 11 8 4 8 25 17 0 8 1	16 18 93 5 24 13 27 00 3	- -7 -1 +1 +3 +1 +4 -2 +1 +1 -2

Top 10 Companies

The top 10 companies during FY 1990 are listed in Exhibit D by rank, along with its FY 1989 rank and the dollar value of the awards it received in both FY 1990 and FY 1989. Exhibit E (page 5) describes the major products of these 10 companies.

Exhibit D

RA	ANK COMPANY NAME		AWARDS (In Billions)	
1990	1989		1990	1989
1 2 3 4 5 6 7 8 9	1 2 3 5 4 6 8 7 10 21	McDonnell Douglas Corp. General Dynamics Corp. General Electric Co. General Motors Corp. Raytheon Co. Lockheed Corp. Martin Marietta Corp. United Technologies Corp. Grumman Corp. Tenneco, Inc.	\$8.2 6.3 5.6 4.1 4.1 3.6 3.5 2.9 2.7 2.4	\$8.6 6.9 5.8 3.7 3.8 3.6 2.4

Exhibit E

COMPANY

MAJOR PRODUCTS

1. McDonnell Douglas Corp.

F-15 EAGLE, F-18 HORNET, AH-64 APACHE, C-17 cargo transport, AV-8 HARRIER, T-45 GOSHAWK, and TTTS aircraft. TOMAHAWK and HARRIER missile systems.

2. General Dynamics Corp.

F-16 FALCON fighter aircraft.
Nuclear submarines.
M-1 tank.
TOMAHAWK, STINGER and RIM-66 missiles.
MK-15 close-in weapon system.
Marine charter.

3. General Electric Co.

AEGIS and TRIDENT missile systems. F-100 and F-110 engines. Nuclear reactors for submarines. Underwater sound equipment. RDT&E for missile/space systems, ships, aircraft, and electronics/communication equipment.

4. General Motors Corp.

AMRAAM, MAVERICK, PHOENIX, TOW, and TRIDENT missile systems.
Components MK-48 torpedo.
Vehicular power transmission components for M-1 Tank.
Construction of electronics/communication facility.

5. Raytheon Co.

PATRIOT, AMRAAM, NATO SEA SPARROW, TRIDENT, HAWK, and AEGIS missile systems and components.
Relocatable Over the Horizon Radar (ROHR).
RDT&E for electronics/communication equipment and missile/space systems. Underwater sound equipment.

Exhibit E (Concluded)

COMPANY

MAJOR PRODUCTS

6. Lockheed Corp.

TRIDENT missile system.
C-130 HERCULES, P-3 ORION. C-141
STARLIFTER, and C-5 GALAXY aircraft.
RDT&E for missile/space systems,
aircraft, and electronics/
communication equipment.

7. Martin Marietta Corp.

RDT&E for TITAN missile system.
A-64 APACHE aircraft.
MK+41 guided missile faunch.
Miscellaneous aircraft accessories and components.
Operation of ammunition facility.

8. United Technologies Corp.

F-100, TF-30, and TF-33 aircraft engines. UH-60 BLACKHAWK, SH-60 SEAHAWK, and CH-53 SEA STALLION helicopters. RDT&E and M/R of aircraft.

9. Grumman Corp.

F-14 TOMCAT, E-2 HAWKEYE, and EA6B PROWLER aircraft.
RDT&E for aircraft, missile/space systems, and electronics/communications equipment.
M&R of A-6 INTRUDER aircraft.

10. Tennedo, Ind.

M/R aircraft carriers. Nuclear submarines.

TABLE 1 INDEX OF 100 PARENT COMPANIES WHICH RECEIVED THE LARGEST DOLLAR VOLUME OF PRIME CONTRACT AWARDS

R	TISCAL		1990
		R	72 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
A	PARENT	A	PARENT
N	COMPANY	N	COMPANY
K		К	
43	AEROSPACE CORPORATION	89	HEWLETT PACKARD COMPANY
28	ALLIED SIGNAL INC	15	HONFYWELL INC
95	AMERADA HESS CORPORATION	18	INTERNATIONAL BUS MCHS CORP
23	AMERICAN TELEPHONE & TELG CO	68	INTERNATIONAL MARINE CARRIERS
72	AMOCO CORPORATION	87	INTERNATIONAL SHIPHOLDING CORF
47	ARCO PRODUCTS COMPANY	24	ITT CORPORATION
93	ARVIN INDUSTRIES INC	48	JOHNS HOPKINS UNIVERSITY
79	ASTRONAUTICS CORP AMERICA	59	JOHNSON CONTROLS INC
34	AVONDALE INDUSTRIES INC	70	KAMAN CORPORATION
27	BATH HCLDING CORPORATION	14	LITTON INDUSTRIES INC
81	BLACK & DECKER CORPORATION	6	LOCKHEED CORPORATION
11	BOEING COMPANY THE	86	LOGICON INC
80	BOLLINGER MACHINE SHOP SHPYRD	31	LORAL CORPORATION
92	BOLT BERANEK & NEWMAN INC	20	LTV CORPORATION
74	C A E INDUSTRIES LTD	7	MARTIN MARIETTA CORPORATION
54	CFM INTERNATIONAL INC	40	MASSACHSTTS INST OF TCHNOLOGY
73	CHEVRON CORPORATION	33	MCDONNELL DGLS GEN DYNAMCS JV
65	CHRYSLER CORPORATION	1	MCDONNELL DOUGLAS CORPORATION
51	COASTAL CORPORATION	91	MIP INSTANDSETZUNGSBETRIC
53	COMPUTER SCIENCES CORPORATION	44	MITRE CORPORATION
62	CONTEL CORPORATION	61	MOBIL CORPORATION
64	CONTROL DATA CORPORATION	50	MORRISON KNUDSEN CORPORATION
94	CROWLEY MARITIME CORPORATION	45	MOTOROLA INC
84	CRS SIRRINE METCALF & EDDY JV	26	NORTHROP CORPORATION
63	CSX CORPORATION	32	OLIN CORPORATION
95	DAY & ZIMMERMANN INC	58	OSHKOSH TRUCK CORPORATION
88	DIGITAL EQUIPMENT CORPORATION	49	FENN CENTRAL CORPORATION
82 39	DUCHOSSOIS ENTERPRISES INC DYNCORP	66	PETERSON BUILDERS INC FHILIP MORRIS COMPANIES INC
41	E SYSTEMS INC	90 56	PHILIPS GLOEILAMPENFABRIEKEN
98	EASTMAN KODAK COMPANY	100	RAM SYS GMBH
77	EATON CORPORATION	5	RAYTHEON COMPANY
67	EMERSON ELECTRIC CO	13	ROCKWELL INTERNATIONAL CORP
42	EXXON CORPORATION	83	ROLLS ROYCE PLC
60	FIJ EX PAN AM NOETHWEST ET AL	46	ROYAL DUTCH SHELL GROUP OF COS
30	FMC CORFORATION	37	SCIENCE APPLICATIONS INTL CORP
25	FORD MOIOR COMPANY	69	SEQUA CORPORATION
55	FORSTMANN LITTLE & CO	97	TALLEY INDUSTRIES INC
36	FOUNDATION HEALTH CORPORATION	35	TELEDYNE INC
21	GENCORP INC	10	TENNECO INC
. 5	GENEFAL DYNAMICS CORPORATION	29	TEXAS INSTRUMENTS INC
57	GENEFAL ELECTRIC CO P L C	19	TEXTRON INC
3	GENERAL ELECTRIC COMPANY	52	THIOKOL CORPORATION
4	GENERAL MOTORS COFFORATION	22	TRW INC
99	GOODYEAR TIRE & RUPHER CO THE	16	UNISYS CORPORATION
9	GRUMMAN CORFORATION	8	UNITED TECHNOLOGIES CORP
17	GTE CORPORATION	78	VARIAN ASSOCIATES INC
71	HARRIS CURFORATION	12	WESTINGHOUSE ELECTRIC CORP
75	HARSON CORPORATION	76	WESTMARK SYSTEMS INC
38	HERCULES INCOFFGRATED	85	WORLD ROSEN KEY AMER ETAL JV
, J			

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
	TOTAL	130,758,093	100.00	100.00
	TOTAL, 100 COMPANIES/SUBSIDIARIES	86,670,694	€6.28	€6.28
1	MCDONNELL DOUGLAS CORPORATION MCDONNELL DOUGLAS ASTRONAUTICS MCDONNELL DOUGLAS HLCPTR CO MCDONNELL DOUGLAS INCO INC MCDONNELL DOUGLAS INFO SYS CO MCDONNELL DOUGLAS TRNING SYS VITEK SYSTEMS INC	6,631,362 57,453 1,433,102 3,153 13,489 72,214 654		
	TOTAL	8,211,427	6.27	6.27
2	GENERAL DYNAMICS CORPORATION BRAINTREE MARITIME CORPORATION CESSNA AIRCRAFT COMPANY INC	6,045,889 236,308 23,896		
	TOTAL	6,306,093	4.82	11.16
3	GENERAL ELECTRIC COMPANY CANADIAN GENERAL ELECTRIC CO ELANO CORPORATION GELCO CORPORATION GENERAL ELECTRIC BASE SUPPORT GENERAL ELECTRIC CGR MANAGMENT TCHNCAL SVCS CMPANY NATIONAL BROADCASTING CO INC REUTER STOKES CANADA LIMITED REUTER STOKES INC DEL TRANSPORT INTL POOL INC TOTAL	5,566,452 5,282 576 1,198 83 288 13,692 105 66 97 1,125 5,588,964	4.27	15.37
4	GENERAL MOTORS CORPORATION ADAM OPEL AKTIENGESELLSCHAFT AMI INSTRUMENTS INC DELCO ELECTRONICS CORPORATION ELECTRONIC DATA SYSTEMS CORP G M HUGHES ELECTRONICS CORP HUGHES AIRCRAFT COMPANY HUGHES DANBURY OPTICAL SYSTEMS HUGHES ELECTRO OPTICAL OPNS IN HUGHES TRAINING SYS INC KALVAR CORPORATION	415,799 429 55 5,751 259,336 6,244 3,275,012 43,675 77,830 22,407 32		
	TOTAL	4,106,570	3.14	18.51

R	FISCAL YEAR I	THOUSANDS	PERCENT	CUMULATIVE
A	COMPANIES	OF	OF	PERCENT OF
N		DOLLARS	TOTAL	TOTAL
5	RAYTHEON COMPANY BEECH AEROSPACE SERVICES INC BEECH AIRCRAFT CORPORATION RAYTHEON SERVICE COMPANY RAYTHEON SUPPORT SERVICES CO RAYTHEON TECH ASST CO INC RAYTHN MDTRRN SSTMS CMPNY SPEED QUEEN COMPANY SWITCHCRAFT INC UNITED BEECHCRAFT INC UNITED ENGINEERS & CONSTRS TOTAL	3,730,675 120,073 42,913 51,717 9,728 39- 356 86 311 36 115,099	3.11	21.63
6	LOCKHEED CORPORATION ANALYTYX ELECTRONIC SYSTEMS LOCKHEED AEROMOD CENTER INC LOCKHEED AEROPARTS INC LOCKHEED ENGINEERING & SCIENCE LOCKHEED MISSILE & SPACE CO LOCKHEED SANDERS INC LOCKHEED SPACE OPERATIONS CO LOCKHEED SUPPORT SYSTEMS INC LOCKHEED WESTERN EXPORT CO MURDOCK ENGINEERING COMPANY	1,495,836 8,197 10,115 1,183 3,700 1,741,832 192,799 24,559 73,076 825 506		
	TOTAL	3,552,628	2.71	24.34
7	MARTIN MARIETTA CORPORATION INTERNATIONAL LIGHT METALS TOTAL	3,490,973 1,019 3,491,992	2.67	27.01
8	UNITED TECHNOLOGIES CORP ADAPTIVE OPTICS ASSOCIATES CARRIER CORPORATION HAMILTON STANDARD ELECTRONICS INTERNATIONAL FUEL CELLS CORP NORDEN SYSTEMS INC OTIS ELEVATOR COMPANY SIKORSKY INTNL PRODUCTS UNITED TCHNOLOGIES OPT SYSTEMS UNITED TECH AUTO GROUP OPRTNS USBI CO	2,756,718 560 2,111 825 450 78,611 41- 15,411 541 469 111		
	TOTAL	2,855,766	2.18	29.20
9	GRUMMAN CORPORATION GRUMMAN AEROSPACE CORPORATION GRUMMAN DATA SYSTEMS CORP GRUMMAN TECHNICAL SERVICES INC TOTAL	2,449,272 179,428 28,266 2,696,966	2.06	31.26

FISCAL TEAR 1990					
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL	
10	TENNECO INC CASE J I COMPANY NEWPORT NEWS INDUSTRIAL CORP NEWPORT NEWS SHPBLDING DRYDOCK PACKAGING CORPORATION OF AMER SPERRY MARINE INC TENNESSEE GAS PIPELINE CO TOTAL	19,094 609 2,367,576 27 22,593 36 2,409,935	1.84	33.10	
11	BOEING COMPANY THE ARGOSYSTEMS INC BOEING AEROSPACE & ELECTRONICS BOEING COMPUTER SERVICES BOEING COMPUTER SUPPORT SVCS BOEING ELECTRONICS INC BOEING LOUISIANA INC BOEING SUPPORT SERVICES U T L CORPORATION	1,527,075 2,032 532,388 19,387 179,018 110 5,322 125 1,163			
	TOTAL	2,266,620	1.73	34.84	
12	WESTINGHOUSE ELECTRIC CORP PERCEPTICS CORPORATION SHAW WALKER CO T S C INC WESTINGHOUSE ENVIR GEO SER WESTINGHOUSE FURNITURE SYSTEMS WESTINGHOUSE R & D CENTER XETRON CORPORATION	2,222,207 295 1,140 8,789 1,275 7,697 849 1,139			
j	TOTAL	2,243,391	1.71	36.55	
13	ROCKWELL INTERNATIONAL CORP ALLEN BRADLEY COMPANY INC COLLINS INTERNATIONAL SVC CO ROCKWELL POWER SYSTEMS TOTAL	1,737,206 157 474,548 5,388 2,217,299	1.69	38.25	
14	LITTON INDUSTRIES INC INCALLS SHIPPUILDING INC LITTON SYSTEMS INC	911,121 665,072	}		
	TOTAL	1,576,193	1.20	39.45	
15	HONEYWELL INC HONEYWELL FEDERAL SYSTEMS HONEYWELL INC GBG HONEYWELL LTD HONEYWELL TURKIARABIA LTD TETRA TECH DATA SYSTEMS INC	1,229,411 157,192 28 424 29 1,053			
	TOTAL	1,388,137	1.06	40.51	

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
16	UNISYS CORPORATION TIMEPLEX INC TOTAL	1,373,010 2,912 1,375,922	1.05	41.57
17	GTE CORPORATION GTE ALASKA INC GTE CALIFORNIA INC GTE GOVERNMENT SYSTEMS CORP GTE HAWAIIAN TELEPHONE CO GTE INTERNATIONAL INC GTE LABORATORIES INC GTE NORTHWEST INCORPORATED GTE PRODUCTS CONNECTICUT CORP GTE PRODUCTS CORP GTE SERVICE CORPORATION GTE SOUTH INCORPORATED GTE SPACENET CORPORATION GTE TELECOM INC GTE TELECOM INC GTE TELECOM SOURCE GTE VALENITE CORP	0 1,949 800 1,198,939 75,851 26 631 106 154 9,006 266 2,234 362 2,079 2,047 41		
	TOTAL	1,294,491	0.98	42.56
18	INTERNATIONAL BUS MCHS CORP IBM DE PANAMA SA TOTAL	1,285,679 92 1,285,771	0.98	43.54
19	TEXTRON INC ACE INDUSTRIES INC AIRFOIL TEXTRON AVCO CORPORATION AVCO RESEARCH LABORATORY INC BABCO TEXTRON INC BELL HELICOPTER INTERNATIONAL BELL HELICOPTER TEXTRON INC CADILLAC GAGE TEXTRON INC EX CELL O CORPORATION H R TEXTRON INC MCCORD WINN TEXTRON INC NORWOOD PRECISION PDTS TEXTRON	242,420 69 365 606,720 21,790 2,983 3,147 250,943 24,269 15,263 22,224 120 65 1,190,378	0.91	44.45
20	LTV CORPORATION AM GENERAL CORPORATION LTV AEROSPACE & DEF CO LTV ENERGY PROD TOTAL	305,011 876,338 1,600	0.90	45.36

-	TISCAL TEAR 1990					
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL		
21	GENCORP INC AEROJET	170,021 962,798				
	TOTAL	1,132,819	0.86	46.22		
22	TRW INC ESL INCORPORATED T R W ELECTRONIC PRODUCTS INC	972,881 108,529 5,885				
	TOTAL	1,087,295	0.83	47.05		
23	AMERICAN TELEPHONE & TELG CO A T & T COMMUNICATIONS INC A T & T PARADYNE CORP BELL TELEPHONE LABS INC WESTERN ELECTRIC SAUDI ARABI	911,743 4,155 889 76 267				
	TOTAL	917,130	0.70	47.75		
24	ITT CORPORATION FELEC SERVICES INC ITT BASE SERVICES INC ITT DIALCOM INC ITT FEDERAL SERVICES CORP ITT GILFILLAN TOTAL	632,669 104,891 6,317 90 118,395 7,866	0.66	48.42		
25	FORD MOTOR COMPANY BDM INTERNATIONAL INC BDM MANAGEMENT SERVICES CO BDM SERVICES COMPANY FORD AEROSPACE CORPORATION FORD MICROELECTRONICS INC UNITED STATES INSTR RENTALS UNITED STATES LEASING INTL	0 144,219 7,181 4,141 612,823 97 89 285		40.01		
	TOTAL	768,835	0.58	49.01		
26	NORTHROP CORPORATION NORTHROP WRLDWIDE AIRCRAFT SVC	674,111 72,328				
	TOTAL	746,439	0.57	49.58		
27	BATH HOLDING CORPORATION BATH IRON WORKS CORPORATION	0 733,856				
	TOTAL	733,856	0.56	50.14		
	L		L	<u> </u>		

	FISCAL YEAR 1990						
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL			
28	ALLIED SIGNAL INC ALLIED SIGNAL AEROSPACE CO SIGNAL RESEARCH CENTER INC	121,099 602,573 841					
	TOTAL	724,513	0.55	50.69			
29	TEXAS INSTRUMENTS INC TEXAS INSTRUMENTS ASIA LTD TEXAS INSTRUMENTS LTD	698,872 442 4,924					
!	TOTAL	704,238	0.53	51.23			
30	FMC CORPORATION LINK BELT CONSTRUCTION EQP CO	633,655 375					
	TOTAL	634,030	0.48	51.72			
31	LORAL CORPORATION	618,184		50.10			
	TOTAL	618,184	0.47	52.19			
32	OLIN CORPORATION PACIFIC ELECTRO DYNAMICS INC PHYSICS INTERNATIONAL COMPANY RAVENNA ARMY AMMUNITION PLANT ROCKET RESEARCH CO TOTAL	545,615 3,038 13,761 10,290 3,016 575,720	0.44	52.63			
33	MCDONNELL DGLS GEN DYNAMCS JV	<u>555,000</u> 555,000	0.42	53.06			
34	AVONDALE INDUSTRIES INC AVONDALE GULFPORT MARINE	537,214 4,268					
	TOTAL	541,482	0.41	53.47			
35	TELEDYNE INC TELEDYNE INDUSTRIES INC	268 514,987					
	TOTAL	515,255	0.39	53.86			
36	FOUNDATION HEALTH CORPORATION	515,206					
	TOTAL	515,206	0.39	54.26			

R A N K	COMPANIES COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
37	SCIENCE APPLICATIONS INTL CORP AMERICAN SYSTEMS ENGRG CORP FALCON ASSOCIATES SAIC ENGINEERING INC	468,867 23,314 4,405 13,908		
	TOTAL	510,494	0.39	54.65
38	HERCULES INCORPORATED SIMMONDS PRECISION PRODUCTS	465,359 26,369		
	TOTAL	491,728	0.37	55.02
39	DYNCORP DYNAIR AVIATION GROUP DYNAIR SYSTEM SERVICES DYNASPAN SERVICES COMPANY DYNCORP APPLIED TECHNOLOGY ITS INTERNATIONAL SERVICE GMBH SEA MOBILITY INC	415,441 549 149 17,841 17,340 3,777 24,777		
	TOTAL	479,874	0.36	55.39
40	MASSACHSTTS INST OF TCHNOLOGY TOTAL	460,100 460,100	0.35	55.74
41	E SYSTEMS INC SERV AIR INC	198,322 261,735		
	TOTAL	, 460,057	0.35	56.09
42	EXXON CORPORATION ESSO STANDARD OIL SA LTD EXXON SHIPPING CO	437,045 473 210		
	TOTAL	437,728	0.33	56.43
43	AEROSPACE CORPORATION	416,217		
	TOTAL	416,217	0.31	56.75
44	MITRE CORPORATION	412,354		
	TOTAL	412,354	0.31	57.06
				•

R	FISCAL YEAR 1	THOUSANDS	PERCENT	CUMULATIVE
A N K	COMPANIES	OF DOLLARS	OF TOTAL	PERCENT OF TOTAL
45	MOTOROLA INC CODEX CORPORATION MOTOROLA COMMUNICATIONS & ELEC MOTOROLA INFORMATION SYSTEMS TEGAL CORPORATION	379,326 8,498 10,891 3,878 40		
	TOTAL	402,633	0.30	57.37
46	ROYAL DUTCH SHELL GROUP OF COS MORRISON MOLDED FIBERGLASS CO PILIPINAS SHELL PETROLEUM CORP SHELL INTERNATIONAL PETROLEUM SHELL MARKETS MIDDLE EAST SHELL OIL COMPANY	0 365 99 1,571 1,389 391,605		
	TOTAL	395,029	0.30	57.67
47	ARCO PRODUCTS COMPANY ARCO POWER TECHNOLOGY	389,915 592		
	TOTAL	390,507	0.29	57.97
48	JOHNS HOPKINS UNIVERSITY	374,819		
	TOTAL	374,819	0.28	58.26
49	PENN CENTRAL CORPORATION CAROL CABLE CO INC G & H TECHNOLOGY INC GENERAL CABLE CO MARATHON BATTERY CO MARATHON LE TOURNEAU COMPANY QUALITY SYSTEMS INC SPERRY RAIL INC VITRO CORPORATION VITRO SERVICES CORPORATION VITRO TECHNICAL SERVICES INC TOTAL	0 176 2,035 613 3,829 108 1,747 34 293,770 61,771 9,203	0.28	58.54
50	MORRISON KNUDSEN CORPORATION MK FERGUSON COMPANY MORRISON KNUDSEN COMPANY INC MORRISON KNUDSEN ENGINEERS MORRISON KNUDSEN INTL CO MORRISON KNUDSEN SERVICES NATIONAL PROJECTS INC NATIONAL STL SHPBLDING CMPANY WESTERN AIRCRAFT MAINTENANCE	0 1,331 10,855 10,542 670 4,090 338 342,989		
	TOTAL	370,735	0.28	58.83

	FISCAL YEAR 1990					
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL		
51	COASTAL CORPORATION COASTAL EAGLE PT OIL COMPANY COASTAL FUELS MARKETING INC COASTAL OIL NEW ENGLAND INC COASTAL OIL NEW YORK INC COASTAL REFINING & MARKETING COASTAL STATES TRADING INC	0 114,458 9,694 1,599 426 202,712 41,743				
	TOTAL	370,632	0.28	59.11		
52	THIOKOL CORPORATION	358,511				
	TOTAL	358,511	0.27	59.39		
53	COMPUTER SCIENCES CORPORATION	319,028				
	TOTAL	319,028	0.24	59.63		
54	CFM INTERNATIONAL INC	318,577				
	TOTAL	318,577	0.24	59.87		
55	FORSTMANN LITTLE & CO E M SYSTEMS INC FL AEROSPACE HOLDINGS CORP FL INDUSTRIES HOLDINGS INC GENERAL INSTRUMENT CORP DEL HYPERION INDUSTRIES CORP LEAR SIEGLER HOLDINGS CORP PEABODY BARNES INC PEABODY TECTANK INC PULLMAN COMPANY THE	0 133 12,671 1,305 120,589 982 163,080 7- 85 73-	0.22	60.10		
56	PHILIPS GLOEILAMPENFABRIEKEN AIRPAX CORP GENERAL ATRONICS CORP MAGNAVOX GOVT & INDSTRL ELCTR MAGNAVOX OVERSEAS LTD NEW ENGLAND RESEARCH CENTER NORTH AMERICAN PHILIPS CORP PHILIPS CONSUMER ELECTRONICS PHILIPS INFORMATION SYSTEMS CO PHILIPS INTERNATIONAL BV PHILIPS MEDICAL SYS NO AMERICA TOTAL	296,763 54 2,952 3,661 273,512 605 33 2,546 64 36 4,655 8,401 296,519	0.22	60.33		
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R	FISCAL TEAR IS	THOUSANDS	PERCENT	CUMULATIVE
A N K	COMPANIES	OF DOLLARS	OF TOTAL	PERCENT OF TOTAL
57	GENERAL ELECTRIC CO P L C A B D HOLDINGS INCORPORATED CANADIAN MARCONI COMPANY CINCINNATI ELECTRONICS CORP CIRCUIT TECHNOLOGY INC G E C AVIONICS LTD G E C INCORPORATED G E C PLESSEY AEROSPACE LTD G E C PLESSEY AREO PRECISION G E C PLESSEY HARINE UNITED G E C PLESSEY MARINE UNITED G E C PLESSEY MAVAL SYSTEMS G E C PLESSEY NAVAL SYSTEMS G E C PLESSEY RESEARCH CASWELL G E C SENSORS LTD LEAR ASTRONICS CORP MARCONI CIRCUIT TECHNOLOGY MARCONI COMMAND & CTRL SYS LTD MARCONI INSTRUMENTS INC PICKER INTERNATIONAL INC PLESSEY NORTH AMERICA DEL CORP SIPPICAN INC	0 1,267 462 16,324 84 26,955 10,273 1,437 1,201 149,010 64 3,872 954 1,327 14,039 6,471 103 2,320 9,610 177 19,339 138 3,139		
	TOTAL	268,566	0.20	60.53
58	OSHKOSH TRUCK CORPORATION	259,183		
	TOTAL	259,183	0.19	60.73
59	JOHNSON CONTROLS INC	253,792		
	TOTAL	253,792	0.19	60.93
60	FED EX PAN AM NORTHWEST ET AL	253,470		
	TOTAL	253,470	0.19	61.12
61	MOBIL CORPORATION MOBIL OIL ITALIANA SPA	237,694 41		
	TOTAL	237,735	0.18	61.30
62	CONTEL CORPORATION AMERICAN SATELLITE COMPANY CONTEL FEDERAL SYSTEMS INC CONTEL OF CALIFORNIA INC TOTAL	54,215 12,454 161,770 514 228,953	0.17	61.48

	FISCAL YEAR 1	990	·	
R	n de la companya (glassia)	THOUSANDS	PERCENT	CUMULATIVE
A	COMPANIES	OF	OF	1 1
N	COMPANIES		1	PERCENT OF
K		DOLLARS	TOTAL	TOTAL
	CCV CORRODATION		l	
63	CSX CORPORATION CSX TRANSPORTATION INC	0 594	1	
	SEA LAND SERVICE INC	226,242		1
	TOTAL .	000000		5. 65
	TOTAL	226,836	0.17	61.65
			i	
64	CONTROL DATA CORPORATION	208,539	i	}
07	CONTROL DATA CANADA LTD	12,810		
1	moma.	204 240		61.00
1	TOTAL	221,349	0.16	61.82
65	CHRYSLER CORPORATION	0		
1 0	ACUSTAR INC	28,342		
l	CHRYSLER TECHNOLOGIES ARBRN SY	91,650		
1	ELECTROSPACE SYSTEMS INC PENTASTAR SUPPORT SERVICES	90,997 4,433		
1	TENTASTAN SOFFORT SERVICES			ŀ
1	TOTAL	215,422	0.16	61.98
1			Ì	
	PETERSON BUILDERS INC			
66	PETENSON BUILDENS INC	211,294		
	TOTAL	211,294	0.16	62.15
1				
67	EMERSON ELECTRIC CO	70,574		
İ	AUTOMATIC SWITCH COMPANY HAZELTINE CORPORATION	509 56,503		
	KAY RAY SENSALL INC	49		
1	LIEBERT CORPORATION	612		
1	MORSE RUBBER PRODUCTS COMPANY ROSEMOUNT ANALYTICAL INC	80 388		1
1	ROSEMOUNT INC	8,379]
	ROSEMOUNT OFFICE SYSTEMS INC	576		
ł	SOUTHWEST MOBILE SYSTEMS CORP VACCO INDUSTRIES	60,828 2,157		
			_	
i	TOTAL	200,655	0.15	62.30
l				
68	INTERNATIONAL MARINE CARRIERS	190,924		
98	IN I ENNA HONAL MANINE CANNIENS	190,924		
1	TOTAL	190,924	0.14	62.44
				Ì
	LOSOUA CORRORATION	·		1
69	SEQUA CORPORATION ATLANTIC RESEARCH CORPORATION	33,098		
	CHROMALLOY GAS TURBINE CORP	74,168 82,361		1
	JANUS SYSTEMS	1,058		1
	JET SERVICES WEST INC	62_]
	TOTAL	190,747	0.14	62.59
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FISCAL YEAR 1990					
R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL	
70	KAMAN CORPORATION ELECTROMAGNETIC LAUNCH KAMAN AEROSPACE CORPORATION KAMAN INSTRUMENTATION CORP KAMAN SCIENCES CORPORATION KAMATICS CORPORATION LOCUS INC RAYMOND ENGINEERING INC TOTAL	17,760 5,288 85.077 57 51,402 2,732 14,294 11,618	0.14	62.73	
71	HARRIS CORPORATION HARRIS SEMICONDUCTOR LANIER WORLDWIDE INC TOTAL	178,486 2,665 7,037 188,188	0.14	62.88	
72	AMOCO CORPORATION AMOCO CHEMICAL COMPANY AMOCO OIL COMPANY TOTAL	2,408 184,490 186,898	0.14	63.02	
73	CHEVRON CORPORATION CHEVRON INTERNATIONAL OIL CO CHEVRON U S A INC TOTAL	1,455 184,861 186,316	0.14	63.16	
74	C A E INDUSTRIES LTD TOTAL	<u>183,530</u> 183,530	0.14	63.30	
75	HARSCO CORPORATION TOTAL	<u>177,999</u> 177,999	0.13	63.44	
76	WESTMARK SYSTEMS INC TRACOR AEROSPACE INC TRACOR APPLIED SCIENCES INC TRACOR FLIGHT SYSTEMS INC TRACOR GIE TRACOR HYDRONAUTICS INC TRACOR INC TRACOR INC TRACOR MARINE INC TRACOR TECHNOLOGY RESOURCES TOTAL	13,498 103,205 10,022 48 1,282 47,698 1,674 211	0.13	63.58	

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
77	EATON CORPORATION AMERICAN NUCLEONICS CORP EATON KENWAY INCORPORATED TOTAL	171,165 670 4,309 176,144	0.13	63.71
78	VARIAN ASSOCIATES INC MACHLETT LABORATORIES INC TOTAL	173,273 29 173,302	0.13	63.84
79	ASTRONAUTICS CORP AMERICA KEARFOTT GUIDANCE NAVIG CORP TOTAL	24,394 148,431 172,825	0.13	63.98
80	BOLLINGER MACHINE SHOP SHPYRD TOTAL	166,791 166,791	0.12	64.10
81	BLACK & DECKER CORPORATION ADVANCED TECHNOLOGY INC PLANNING RESEARCH CORPORATION TOTAL	1,570 78,390 85,561 165,521	0.12	64.23
82	DUCHOSSOIS ENTERPRISES INC ARES INC CHAMBERLAIN MANUFACTURING CORP TOTAL	0 59 161,143 161,202	0.12	64.35
83	ROLLS ROYCE PLC ROLLS ROYCE INC TOTAL	787 160,224 161,011	0.12	64.48
84	CRS SIRRINE METCALF & EDDY JV	160,275 160,275	0.12	64.60
85	WORLD ROSEN KEY AMER ETAL JV TOTAL	<u>160,263</u> 160,263	0.12	64.72

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
86	LOGICON INC EAGLE TECHNOLOGY INC R & D ASSOCIATES TOTAL	79,619 24,206 53,499 157,324	0.12	64.84
87	INTERNATIONAL SHIPHOLDING CORP CENTRAL GULF LINES INC WATERMAN STEAMSHIP CORPORATION TOTAL	16,313 140,808 157,121	0.12	64.96
89	DIGITAL EQUIPMENT CORPORATION DIGITAL EQUIPMENT GMEH DIGITAL EQUIPMENT INTL TOTAL	146,453 3,134 53_ 149,640	0.11	65.08
83	HEWLETT PACKARD COMPANY APOLLO COMPUTER INC HEWLETT PACKARD GMBH VERTRIEBS TOTAL	147,177 544 1,317 149,038	0.11	65.19
90	PHILIP MORRIS COMPANIES INC ALL AMERICAN GOURMET CO THE KRAFT GENERAL FOODS INC MAYER OSCAR FOODS CORPORATION PHILIP MORRIS INCORPORATED	51,993 1,854 64,466 14,875 7,695		
	TOTAL	140,883	0.10	65.30
91	MIP INSTANDSETZUNGSBETRIC TOTAL	138,857 138,857	0.10	65.40
92	BOLT BERANEK & NEWMAN INC BBN SYSTEMS & TECHNOLOGIES TOTAL	136,760 1,934 138,694	0.10	65.51
93	ARVIN INDUSTRIES INC CALSPAN CORPORATION SCHRADER AUTOMOTIVE INC SYSTEMS RECEARCH LARGRATORIES	90,442 122 43,632		
	TOTAL	134,196	0.10	65,61

R A N K	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF TOTAL	CUMULATIVE PERCENT OF TOTAL
94	CROWLEY MARITIME CORPORATION AMERICAN TRANSPORT LINES LTD PUGET SOUND TUG BARGE COMPANY TRAILER MARINE TRANSPORT CORP TOTAL	42,512 67,944 13,402 10,000 133,858	0.10	65.72
95	DAY & ZIMMERMANN INC OPERATING PLANT SERVICES SYSTEMS ENGINEERING ASSOCIATES	98,905 31 30,534	V. 10	
	TOTAL	129,470	0.09	65.81
96	AMERADA HESS CORPORATION HESS OIL VIRGIN ISLANDS CORP TOTAL	34,557 90,151 124,708	0.09	65.91
97	TALLEY INDUSTRIES INC ELECTRODYNAMICS INC MCMULLEN JOHN J ASSOCIATES INC MINELCO INC ROWE INDUSTRIES INC TALLEY DEFENSE SYSTEMS INC UNIVERSAL PROPULSION COMPANY WATERBURY COMPANIES INC WATERS MANUFACTURING INC	1,295 1,613 28,097 66 95 69,610 21,818 26 54		
98	TOTAL EASTMAN KODAK COMPANY DATATAPE INCORPORATED HOLSTON DEFENSE CORPORATION	122,674 40,753 3,665 74,061	0.09	+6.00
	STERLING DRUG INC STERLING PRODUCTS INTL	1,390 1,919	0.09	F6.10
99	GOODYEAR TIRE & RUBBER CO THE	116,007 3,701		
	TOTAL	119,708	0.09	66,19
100	RAM SYS GMBH	119,328	<u>.</u>	
	TOTAL	119,328	0.09	66.28